

WHAT IS CLAIMED IS:

1. An inbred cucumber seed designated 8D-5079 wherein a sample of said seed has been deposited under ATCC Accession No. \_\_\_\_\_.
2. A cucumber plant, or parts thereof, produced by growing the seed of claim 1.
3. Pollen of the plant of claim 2.
4. An ovule or ovules of the plant of claim 2.
5. A cucumber plant, or parts thereof, having all of the physiological and morphological characteristics of the cucumber plant of claim 2.
6. The cucumber plant of claim 2, wherein said plant is male sterile.
7. A tissue culture of regenerable cells of a cucumber plant of variety 8D-5079, wherein the tissue regenerates plants capable of expressing all the morphological and physiological characteristics of cucumber line 8D-5079, representative seeds having been deposited under ATCC number \_\_\_\_\_.
8. The tissue culture of claim 7, selected from the group of protoplast and calli wherein the regenerable cells are derived from embryos, protoplasts, meristematic cells, callus, pollen, leaves, anthers, stems, petioles, roots, root tips, fruits, seeds, flowers, cotyledons, hypocotyls
9. A cucumber plant regenerated from the tissue culture of claim 7, capable of expressing all the morphological and physiological characteristics of inbred cucumber line 8D-5079, representative seeds having been deposited under ATCC number \_\_\_\_.
10. A method for producing a hybrid cucumber seed comprising crossing a first inbred parent cucumber plant with a second inbred parent cucumber plant and harvesting the resultant hybrid cucumber seed, wherein said first or second parent cucumber plant is the cucumber plant of claim 2.
11. A hybrid cucumber seed produced by the method of claim 10.
12. A hybrid cucumber plant, or parts thereof, produced by growing said hybrid cucumber seed of claim 11.
13. Cucumber seed produced by growing said hybrid cucumber plant of claim 12 and harvesting the resultant seed.
14. A method for producing a hybrid cucumber seed comprising crossing an inbred

plant according to claim 2 with another, different cucumber plant.

15. A hybrid cucumber seed produced by the method of claim 14.
16. A hybrid cucumber plant, or its parts, produced by growing said hybrid cucumber seed of claim 15.
17. Cucumber seed produced from said hybrid cucumber plant of claim 16.
18. A method for producing a 8D-5079-derived cucumber plant, comprising:
  - a) crossing inbred cucumber line 8D-5079, a sample of seed of said line having been deposited under ATCC accession number \_\_\_\_\_, with a second cucumber plant to yield progeny cucumber seed;
  - b) growing said progeny cucumber seed, under plant growth conditions, to yield said 8D-5079-derived cucumber plant.
19. A 8D-5079-derived cucumber plant, or parts thereof, produced by the method of claim 18, said 8D-5079-derived cucumber plant expressing a combination of at least two 8D-5079 traits selected from the group consisting of: extended yield pattern, indeterminate growth, a round cross section, a very dark green skin color, a reduced blossom end striping, a small seed cavity, a small blossom end, a very high yield, resistant or tolerant to Angular Leaf Spot, Anthracnose race 2, Cucumber scab, Powdery mildew and Cucumber mosaic virus, adapted to North America, Mexico, Central and South America and Europe, and used to produce hybrids having a maturity between 55 and 62 days.
20. The method of claim 18, further comprising:
  - c) crossing said 8D-5079-derived cucumber plant with itself or another cucumber plant to yield additional 8D-5079-derived progeny cucumber seed;
  - d) growing said progeny cucumber seed of step (c) under plant growth conditions, to yield additional 8D-5079-derived cucumber plants;
  - e) repeating the crossing and growing steps of (c) and (d) from 0 to 7 times to generate further 8D-5079-derived cucumber plants.
21. A 8D-5079-derived cucumber plant, or parts thereof, produced by the method of claim 20, said 8D-5079-derived cucumber plant expressing a combination of at least two 8D-5079 traits selected from the group consisting of: extended yield pattern,

indeterminate growth, a round cross section, a very dark green skin color, a reduced blossom end striping, a small seed cavity, a small blossom end, a very high yield, resistant or tolerant to Angular Leaf Spot, Anthracnose race 2, Cucumber scab, Powdery mildew and Cucumber mosaic virus, adapted to North America, Mexico, Central and South America and Europe, and used to produce hybrids having a maturity between 55 and 62 days.

22. The method of claim 18, still further comprising utilizing plant tissue culture methods to derive progeny of said 8D-5079-derived cucumber plant.

23. A further 8D-5079-derived cucumber plant, or parts thereof, produced by the method of claim 22, said 8D-5079-derived cucumber plant expressing a combination of at least two 8D-5079 traits selected from the group consisting of: extended yield pattern, indeterminate growth, a round cross section, a very dark green skin color, a reduced blossom end striping, a small seed cavity, a small blossom end, a very high yield, resistant or tolerant to Angular Leaf Spot, Anthracnose race 2, Cucumber scab, Powdery mildew and Cucumber mosaic virus, adapted to North America, Mexico, Central and South America and Europe, and used to produce hybrids having a maturity between 55 and 62 days.

24. The cucumber plant, or parts thereof, of claim 2, wherein the plant or parts thereof have been transformed so that its genetic material contains one or more transgenes operably linked to one or more regulatory elements.

25. A method for producing a cucumber plant that contains in its genetic material one or more transgenes, comprising crossing the cucumber plant of claim 24 with either a second plant of another cucumber line, or a non-transformed cucumber plant of the line 8D-5079, so that the genetic material of the progeny that result from the cross contains the transgene(s) operably linked to a regulatory element.

26. Cucumber plants, or parts thereof, produced by the method of claim 25.

27. A method for developing a cucumber plant in a cucumber plant breeding program using plant breeding techniques which include employing a cucumber plant,

or its parts, as a source of plant breeding material comprising: obtaining the cucumber plant, or its parts, of claim 2 as a source of said breeding material and wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

28. A cucumber plant, or parts thereof, produced by the method of claim 27, said cucumber plant expressing a combination of at least two 8D-5079 traits selected from the group of: extended yield pattern, indeterminate growth, a round cross section, a very dark green skin color, a reduced blossom end striping, a small seed cavity, a small blossom end, a very high yield, resistant or tolerant to Angular Leaf Spot, Anthracnose race 2, Cucumber scab, Powdery mildew and Cucumber mosaic virus, adapted to North America, Mexico, Central and South America and Europe, and used to produce hybrids having a maturity between 55 and 62 days.

29. The cucumber plant of claim 5, further comprising a single gene conversion.

30. The single gene conversion cucumber plant of claim 29, wherein the gene is selected from the group consisting of: a transgene, a dominant allele, and a recessive allele.

31. The single gene conversion cucumber plant of claim 29, wherein the gene confers a characteristic selected from the group consisting of: sex determination, herbicide resistance, insect resistance, resistance to bacterial, fungal, or viral disease, and improved nutritional and agronomic quality.

32. A cucumber plant, or parts thereof, wherein at least one ancestor of said cucumber plant is the cucumber plant of claim 2, said cucumber plant expressing a combination of at least two 8D-5079 traits selected from the group consisting of: extended yield pattern, indeterminate growth, a round cross section, a very dark green skin color, a reduced blossom end striping, a small seed cavity, a small blossom end, a very high yield, resistant or tolerant to Angular Leaf Spot, Anthracnose race 2, Cucumber scab, Powdery mildew and Cucumber mosaic virus, adapted to North

America, Mexico, Central and South America and Europe, and used to produce hybrids having a maturity between 55 and 62 days.